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**SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT
NORTH ATLANTIC RIDGE, 28 MARCH 1976**

TELEDYNE GEOTECH

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
North Atlantic Ridge, 28 March 1976**

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MAY 1976

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SDCS EVENT REPORT NO. 96

North Atlantic Ridge, 28 March 1976

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

| | "P" Arrival | Origin Time | Lat. | Long. | m_b | M_s |
|---------|-------------|-------------|------|-------|-------|-------|
| NORSAR | 20:27:32.1 | 20:19:29 | 32 N | 040 W | 5.1 | N/A |
| Hagfors | 20:27:39.7 | 20:19:42 | 33 N | 038 W | 5.3 | 5.2 |

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

20:19:45.7 34.2N 038.7W 5.3 5.6

The programs used for LASA, NORSAR and ALPA data recovery are presently undergoing modifications. Information for LASA short-period is reported from their Teleseism Event Report; NORSAR short-period is obtained from their bulletin. The long-period array beam recovery for these stations will be resumed upon completion of these modifications.

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at all SDCS stations were rotated.

Long-period signals were recorded at all SDCS stations. All LP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal LP channels at WH2YK, CPSO, RK-ON and HN-ME were rotated. Signal clipping prevented rotation of the LP horizontal channels at FN-WV.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response).

STATION DESCRIPTION

| SITE CODE | LOCATION | SITE COORDINATES | | | ELEVATION METERS | INSTRUMENTATION | |
|-----------|----------------------------|------------------|----|--------|------------------|------------------|--------------------|
| | | DEG | MN | SECS | | SHORT-PERIOD | LONG-PERIOD |
| ALPA | Alaska | 65 | 14 | 00.0 N | 626 | None | 31300 |
| | | 147 | 44 | 36.0 W | | | |
| CPSO | McMinnville, Tennessee | 35 | 35 | 41.4 N | 574 | 6480 V 7515 H | SL210 V SL220 H |
| | | 085 | 34 | 13.5 W | | | |
| FN - WV | Franklin, West Virginia | 38 | 32 | 58.0 N | 910 | KS36000 | KS36000 |
| | | 079 | 30 | 47.0 W | | | |
| LASA | Billings, Montana | 46 | 41 | 19.0 N | 744 | HS10 | 7505A V 8700C H |
| | | 106 | 13 | 20.0 W | | | |
| HN-ME | Houlton, Maine | 46 | 09 | 43.0 N | 213 | KS36000 | KS36000 |
| | | 067 | 59 | 09.0 W | | | |
| NORSAR | Kjeller, Norway | 60 | 49 | 25.4 N | 379 | HS10 | 7505A V 8700C H |
| | | 010 | 49 | 56.5 E | | | |
| RK-ON | Red Lake, Ontario | 50 | 50 | 20.0 N | 360 | 18300 | SL210 V SL220 H |
| | | 093 | 40 | 20.0 W | | | |
| WH2YK | White Horse, Yukon | 60 | 41 | 41.0 N | 853 | 18300 | SL210 V SL220 H |
| | | 154 | 58 | 02.0 W | | | |

HYPOCENTER DETERMINATION

INPUT FOR EVENT 28 MAR 76
 20:19:29.0 32.000N 40.000W 0KM.

| STA. | ARRIVAL | RESIDUALS | | DIST. | AZ. |
|-------|------------|-----------|------|-------|-------|
| | | CALC | REST | | |
| HN-ME | 20 25 12.1 | 0.1 | -0.1 | 25.2 | 307.1 |
| FN-WV | 20 26 22.1 | 0.8 | 0.7 | 33.0 | 289.6 |
| CPSO | 20 27 05.7 | -0.6 | -0.6 | 38.2 | 285.9 |
| RK-ON | 20 27 43.4 | -0.7 | -0.6 | 42.8 | 310.1 |
| NAO | 20 27 32.1 | -0.0 | -0.1 | 41.3 | 34.4 |
| LAO | 20 28 51.7 | 0.1 | 0.2 | 51.4 | 305.5 |
| WH2YK | 20 30 18.8 | 0.3 | 0.6 | 63.8 | 327.0 |

67 HERFIN TRAVEL TIME TABLES

| ORIGIN | LAT. | LONG. | DEPTH (KM) | SDV | IT | STA |
|------------|---------|---------|------------|-----|----|-----|
| 20:19:38.8 | 34.154N | 38.702W | -46. CAL | 0.5 | 4 | 7 |
| 20:19:45.7 | 34.157N | 38.716W | 0. REST | 0.5 | 3 | 7 |

| CALC | REST |
|-----------|-----------|
| 0 . 0 | 0 . 0 |
| 4 . 1 | 4 . 1 |
| 2 0. 0 0 | 2 0. 0 0 |
| · · · · · | · · · · · |
| 0 0. 0 0 | 0 0. 0 0 |
| 0 . 0 | 0 . 0 |
| 0 . 0 | 0 . 0 |

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF.. LEVEL, SDV= 1.20
 MAJOR 128.6KM. MINOR 28.3KM. AZ= 165 AREA= 11454 SQ.KM. REST

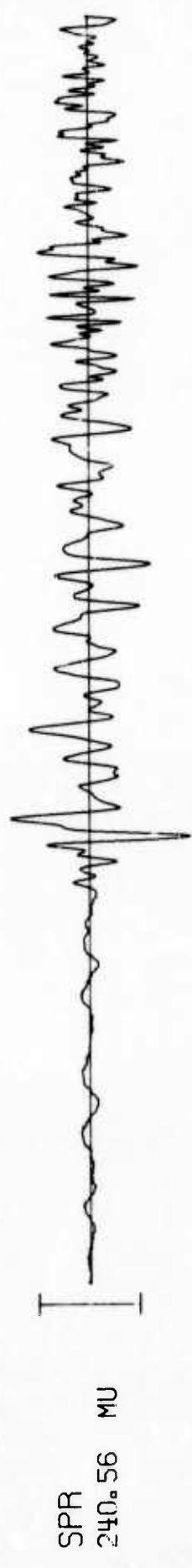
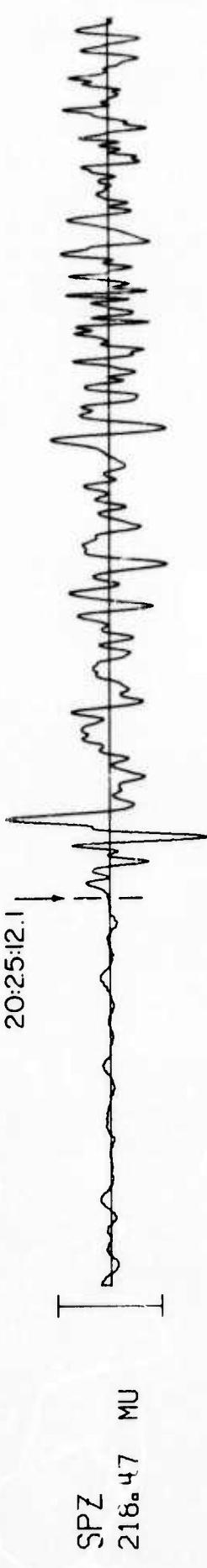
DATA SUMMARY

INPUT FOR EVENT 28 MAR 76
 20:19:29.0 32.000N 40.000W 0KM.

| STA. | PHASE | ARRIVAL | | | | MAGNITUDE | | | |
|-------|-------|------------|------|------|-------|-----------|----|------|------|
| | | TIME | INST | PER | A/T | MB | MS | DIR | DIST |
| HN-ME | EP | 20 25 12.1 | SPZ | 0.9 | 228. | 5.53 | | 25.2 | |
| HN-ME | LQ | 20 31 47.0 | LPT | 27.0 | 671. | | | | |
| HN-ME | LR | 20 33 38.0 | LPZ | 21.0 | 9999. | 0.0 | | 25.2 | |
| FN-WV | FP | 20 26 22.1 | SPZ | 1.4 | 127. | 5.50 | | 33.0 | |
| FN-WV | LQ | 20 33 48.0 | LPT | 35.0 | 9999. | | | | |
| FN-WV | LR | 20 37 29.0 | LPZ | 18.0 | 512. | 5.35 | | 33.0 | |
| CPSO | EP | 20 27 05.7 | SPZ | 1.2 | 44. | 4.83 | | 38.2 | |
| CPSO | LQ | 20 36 47.0 | LPT | 29.0 | 1104. | | | | |
| CPSO | LR | 20 39 28.0 | LPZ | 20.0 | 639. | 5.51 | | 38.2 | |
| NAO | EP | 20 27 32.1 | AB | 1.2 | 69. | 5.04 | | 41.3 | |
| RK-ON | EF | 20 27 43.4 | SPZ | 0.9 | 155. | 5.39 | | 42.8 | |
| RK-ON | LQ | 20 41 33.0 | LPT | 20.0 | 651. | | | | |
| RK-ON | LR | 20 44 42.0 | LPZ | 20.0 | 1673. | 5.97 | | 42.8 | |
| LAO | EP | 20 28 51.7 | SAB | 99.9 | 9999. | | | | |
| WH2YK | EP | 20 30 18.8 | SPZ | 0.8 | 85. | 5.61 | | 63.8 | |
| WH2YK | LQ | 20 54 04.0 | LPT | 19.0 | 377. | | | | |
| WH2YK | LR | 20 57 17.0 | LPZ | 20.0 | 9999. | 0.0 | | 63.8 | |

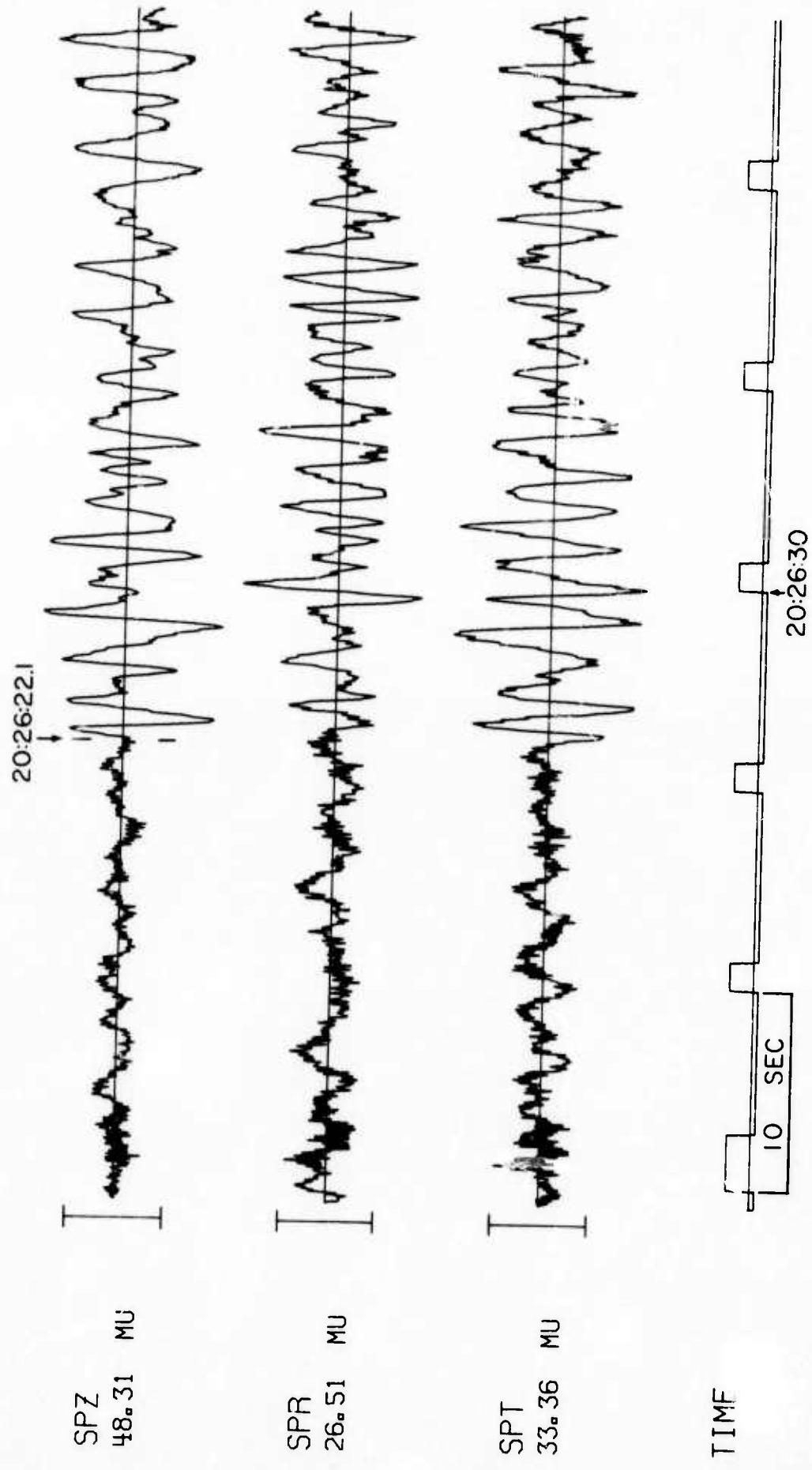
| ORIGIN | LAT. | LONG. | DEPTH (KM) | MAG | SDV | STA | LPMAG | LPSDV | LPSTA |
|------------|---------|---------|------------|------|------|-----|-------|-------|-------|
| 20:19:38.8 | 34.154N | 38.702W | 0. CALC | 5.32 | 0.31 | 6 | 5.61 | 0.3 | 3 |
| 20:19:45.7 | 34.157N | 38.716W | 0. REST | 5.32 | 0.31 | 6 | 5.61 | 0.3 | 3 |

HN-ME 28 MAR 76



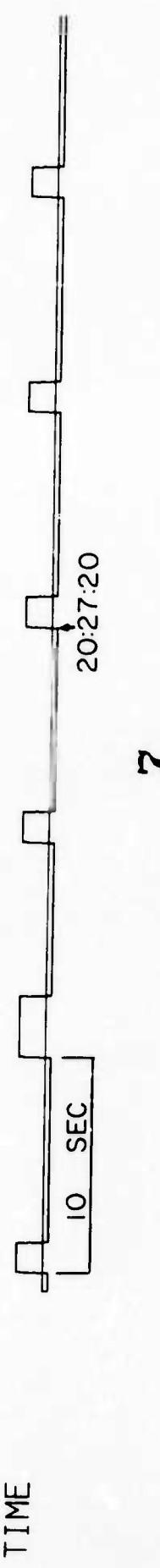
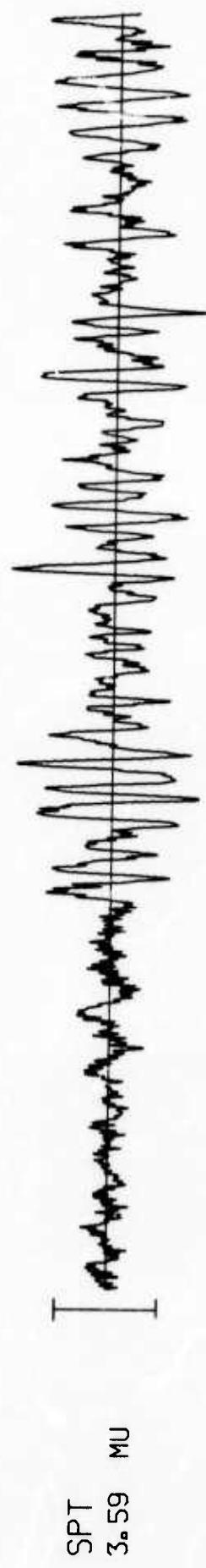
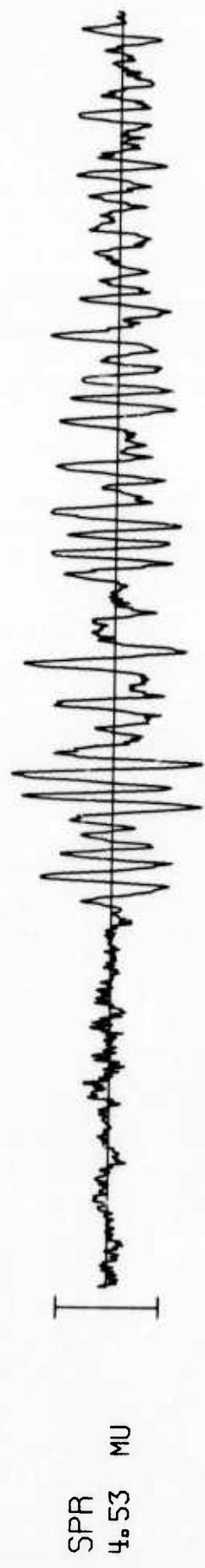
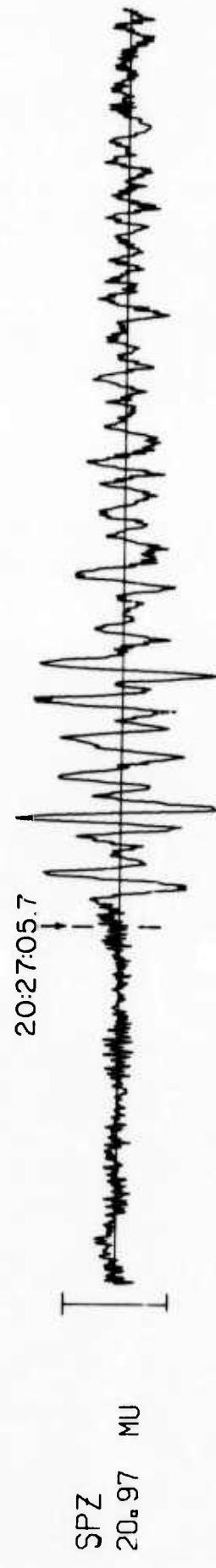
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FN-WV 28 MAR 76

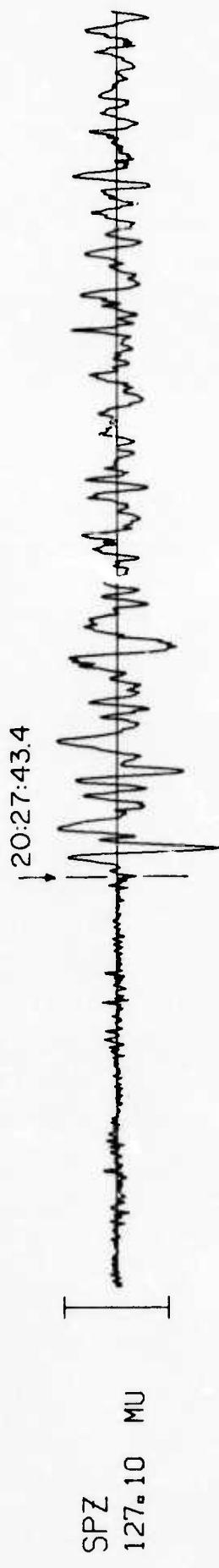


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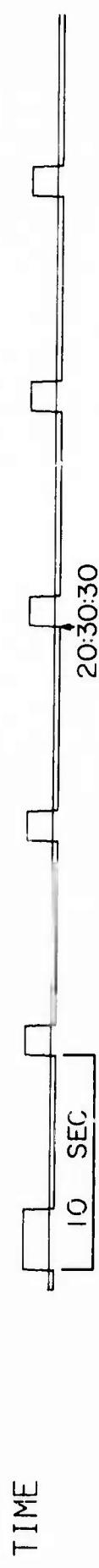
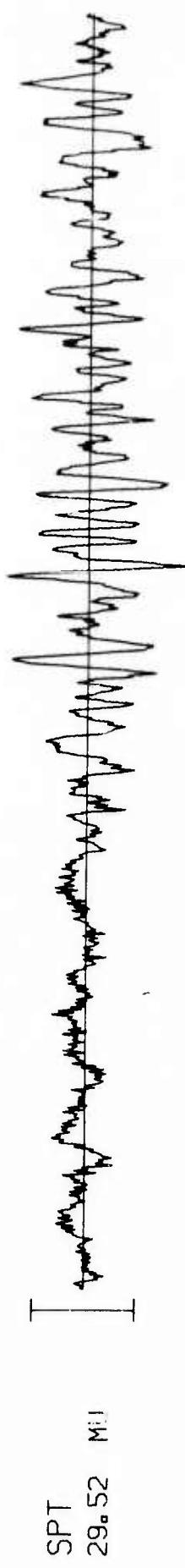
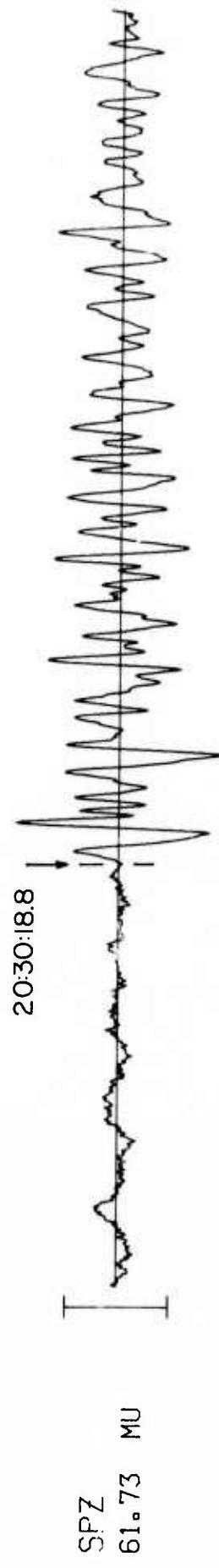
CP-SU 28 MAR 76



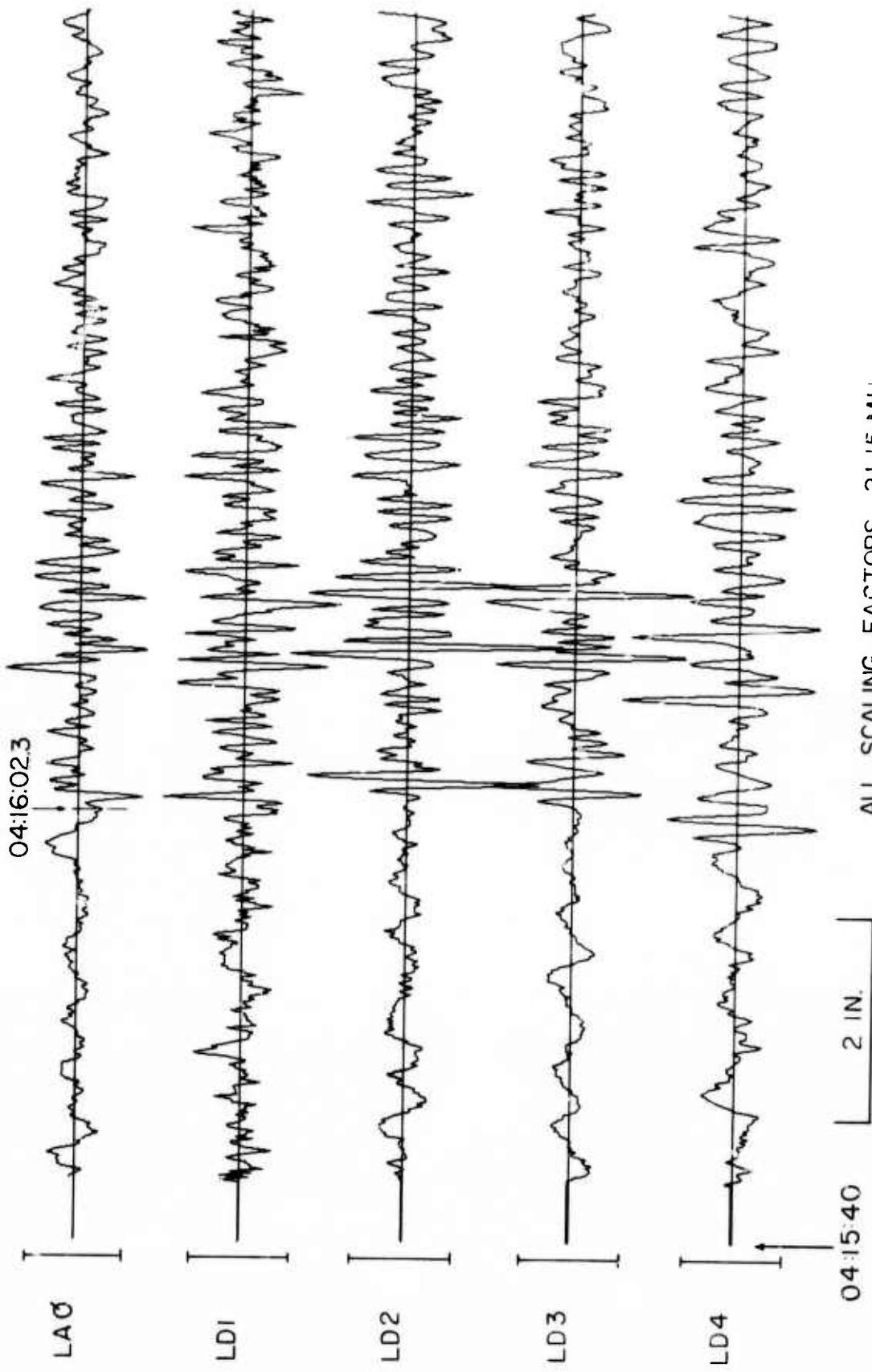
RK-ON 28 MAR 76



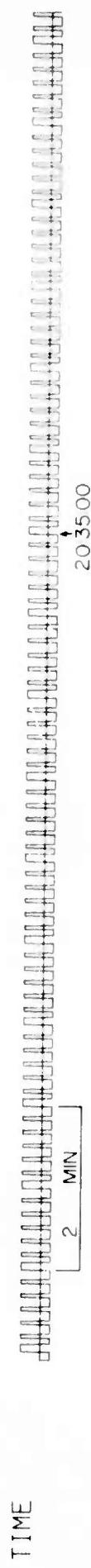
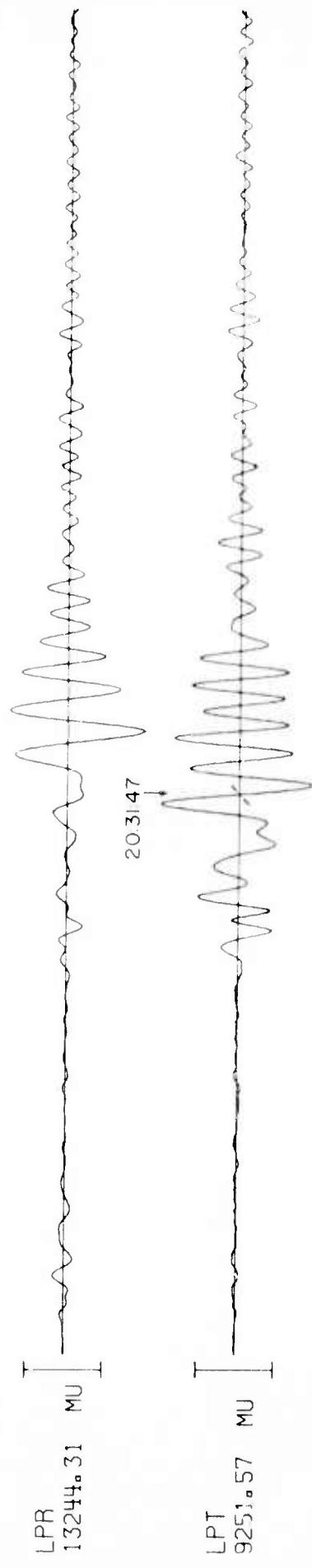
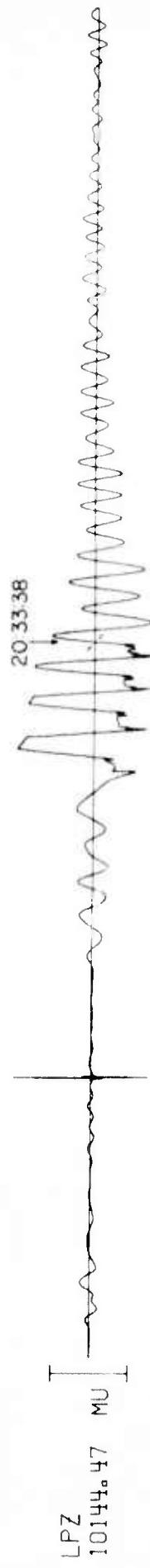
WH2YK 28 MAR 76



LASA INFINITE VELOCITY SUBARRAY SUMS 20 MAR 76

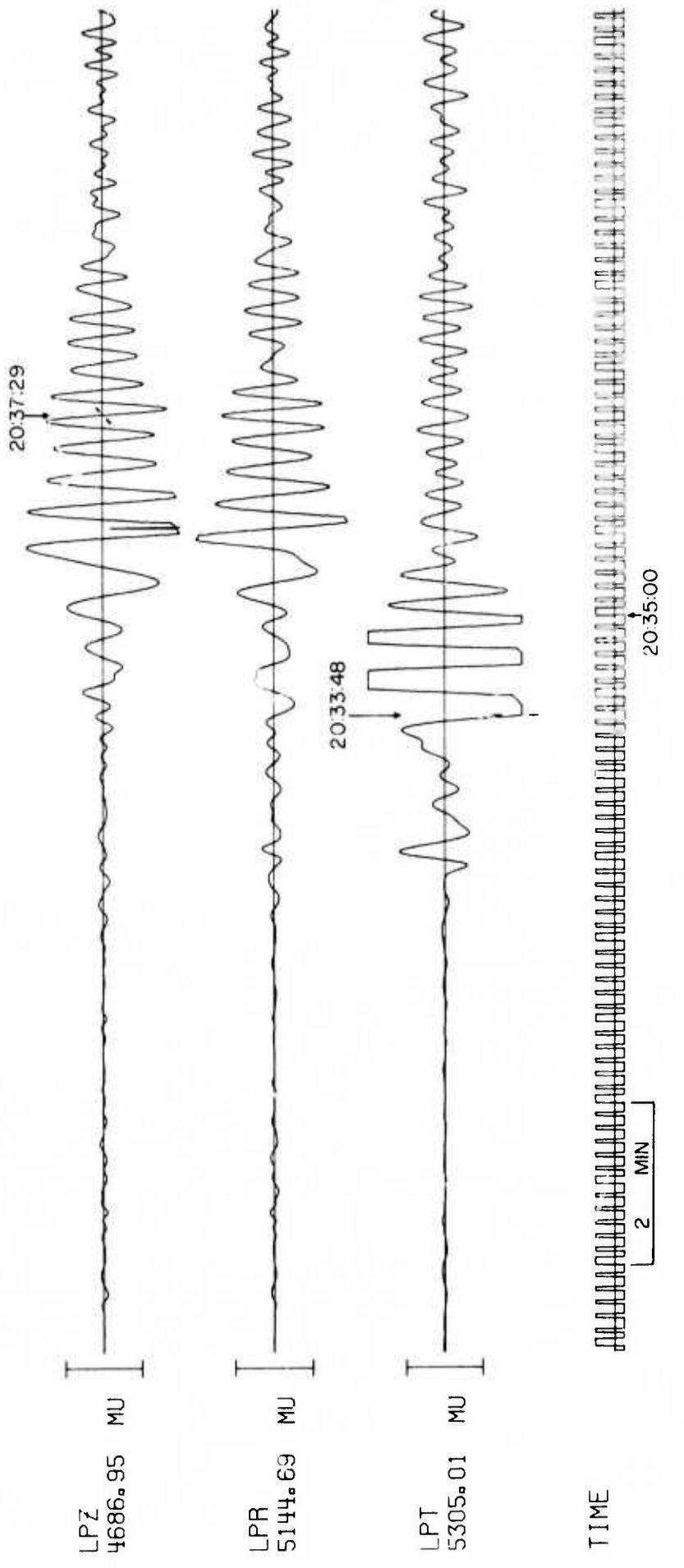


HN-ME 28 MAR 76



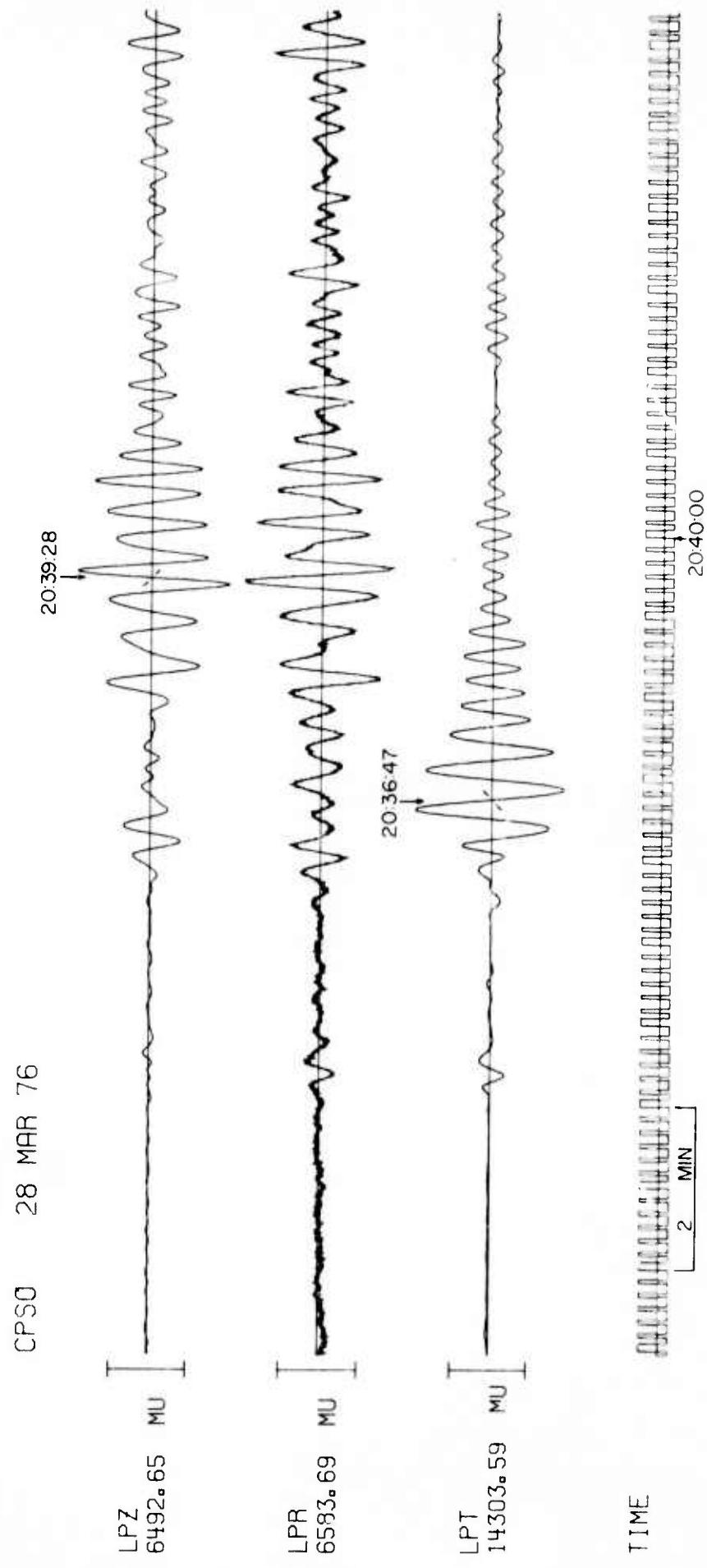
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FN-WV 28 MAR 76

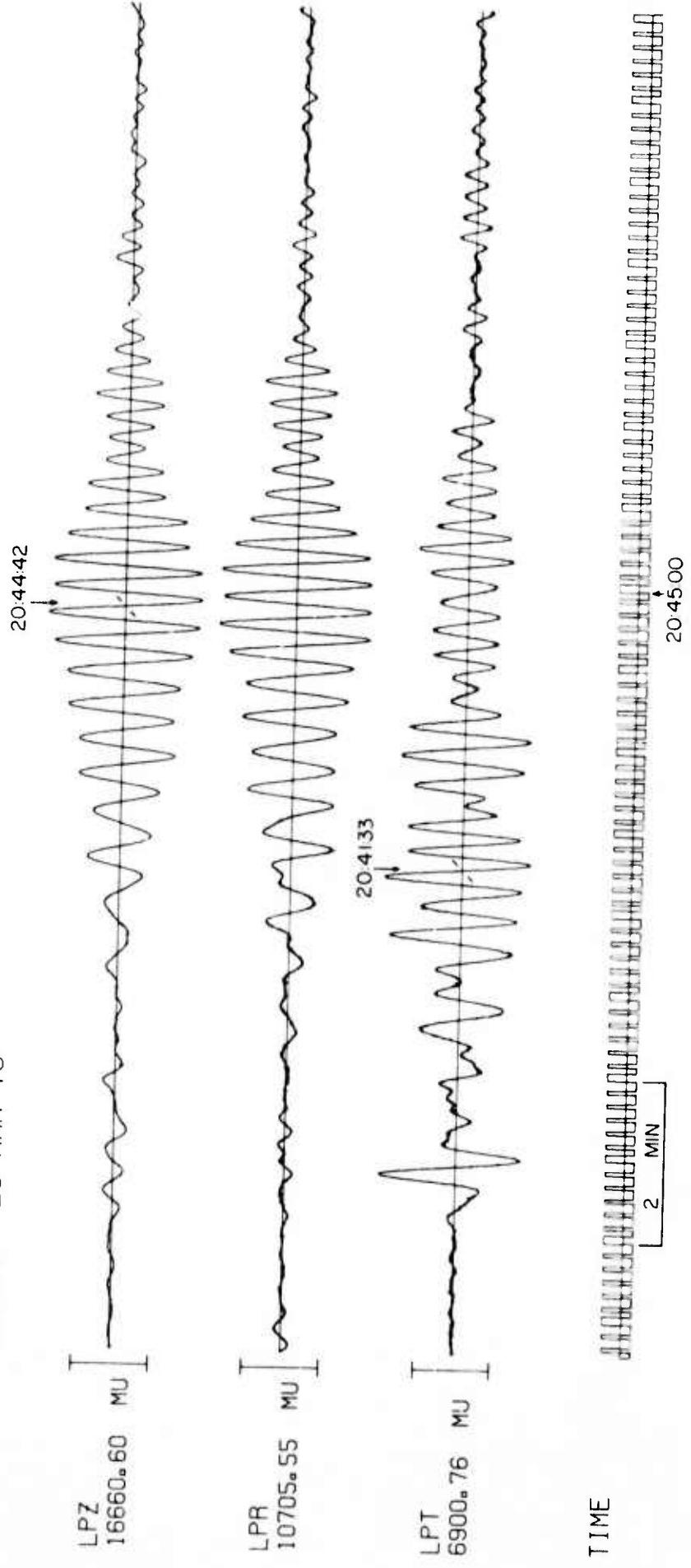


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RK-ON 28 MAR 76



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WH2YK 28 MAR 76

